# Vatsa Patel

Passionate & Proven Software Engineer | Looking for Summer 2021 Internships

San Francisco Bay Area

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## Experience

## Software Engineering Intern | 3D RoomSpace

Los Angeles, CA • May 2020 - Aug 2020

- Developed core services for the rental platform to automate leasing, manage listings, deploy contracts on blockchain.
- Rearchitected and migrated independent services under a scalable Kubernetes environment.

Tech Stack: GCP Cloud run, Kubernetes Engine | Node, GraphQL | React Native, React, Gatsby | DynamoDB

## **Contractor Software Engineer**

San Francisco, CA • May 2020 - Present

- UniversityEats: Building service using Plaid to automatically analyze spendings from all linked banks and set goals.
- PodSource, SF: Helped move to a scalable serverless architecture reducing monthly bills by 72%.
- Built a tool to automatically tag and push docker images to 8 different Container Registries with multiple logins.

## Software Engineer | A D Patel Institute of Technology

## **Learning Management Platform**

Part-Time • Aug 2017 - Sept 2018

- Designed & developed a platform that automates and solves existing paper-based problems of Class Scheduling, Information sharing, Evaluations, Asset Management in which lead & mentored team of 5 engineers.
- Engineered highly-available backend services that are deployed through an in-house private cloud cluster through OpenStack with auto-scaling.
- In-house designed & 3D printed biometric fingerprint devices that facilitate classroom attendance centrally.

Tech Stack: React, React Native, Electron | NodeJS, Golang | MemSQL, HBase, Aerospike.

ADIT Alumni Hub

Part-Time • Aug 2016 - Mar 2018

• Designed & **Developed a social platform** from scratch to allow Alumni to reconnect with each other, discover other alumni in same region and profession, share jobs & events. **Attained 6,400 users within first 3 months.** 

Tech Stack: NodeJS, PHP | React, JQuery | MySQL, Memcached

## **Smarq Technologies**

Dec 2015 - May 2016

- Ideated a startup at Qualcomm incubator which was selected in the top-10 startup ideas out of thousands of applicants.
- Smarq: tightly-knit ecosystem of smart sensors capable of automation sequences based on local location of user.

#### Software Developer | Purva Couture

Aug 2015 - Dec 2015

• Single-handedly **developed a cloud-based Business Operations system** that managed from Sales to Production to Deliveries **handling 700+ clients & revenue of \$1M+.** 

## **Projects**

SlackHR Feb 2020 - May 2020

• Developed a Slack plugin application that helps combat abusive conduct at a workplace backed by a Multi-Label classifier using Neural Network. Currently used at IBM research team's Slack.

## Reverse proxy to increase downlink bandwidth

Aug 2019 - Sep 2019

- Developed a reverse proxy that substantially minimizes the effect of Bandwidth Delay Product on TCP Throughput by buffering the file on multiple connections.
- Preliminarily achieved 8x improvement in streaming on intercontinental bandwidth with BBR congestion control.

## Federated Learning - Privacy Enhanced Collaborative Machine Learning

Jan 2019 - Aug 2019

- Optimized Federated Averaging Algorithm optimized for Large-Scale LSTM-CNN when the input consists of large number of small-sized updates in Homomorphic Encryption.
- Submitted and got invited to present my research paper in IEEE conference.

## Skills

**Backend:** NodeJS, PHP, Python, Java, C++ **Database:** SQL: MySQL, Postgres | NoSQL: MongoDB, Redis, DynamoDB **DevOps:** AWS, GCP, Docker, Kubernetes, CI/CD. **Frontend:** JavaScript:React, React-Native, Android, HTML/CSS

## Education

## San Jose State University

Jan 2020 - Dec 2021 Expected

Candidate for Masters in Computer Science. **Current GPA: 3.85**Dual Specialization: Cloud Computing and Network Programming

## Gujarat Technological University

Jul 2015 - Jul 2019

Bachelor of Engineering in Computer Science. GPA: 3.97